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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES, AND TOXIC SUBSTANCES

Memorandum

DATE: October 7, 2008

SUBJECT: Transmission of Review and Reference Materials for the

October 28 – 31, 2008 Session of the FIFRA Scientific Advisory Panel (SAP) Entitled "Assessing Ecological Risks of Pesticides with Persistent, Bioaccumulative

and Toxic Characteristics"

FROM: Donald Brady, Director

Environmental Fate and Effects Division Office of Pesticide Programs (7507P)

TO: Myrta Christian, Designated Federal Official

FIFRA Scientific Advisory Panel

Office of Science Coordination and Policy (7201M)

A hard copy of a journal article and compact discs containing the documents for the October 28 - 31, 2008 FIFRA SAP session: "Assessing Ecological Risks of Pesticides with Persistent, Bioaccumulative and Toxic Characteristics" are attached. These documents include the White Paper, which is being provided for the SAP's review, along with reference materials.

These documents do not contain any information protected under the statute as Confidential Business Information (CBI). However, the Arnot and Gobas paper is protected by copyright. The Environmental Fate and Effects Division has obtained permission to photocopy and distribute this copyrighted article for purposes of this SAP review only.

The CDs attached contain the documents identified in Appendix 1. We have provided access to additional references in Appendix 2, which provides links to the ecological test guidelines.

Please feel free to call upon us if you have any questions or need additional references. Please note that we would have to seek permission to photocopy and distribute any journal articles.

Appendix 1. List of Review and Reference Documents

| Review Document | File Name | Source | Author(s) | Date |
|---|--|--------|-----------|---------------------|
| White Paper on Methods for | SAP_PBT_White_Paper | Disk 1 | US EPA | October 7, |
| Assessing Ecological Risks of | _Final_Oct_7_08d.pdf | | | 2008 |
| Pesticides with Persistent, | | | | |
| Bioaccumulative and Toxic | | | | |
| Characteristics | | | | |
| Appendix C, Part 2 (PRZM/EXAMS Output for Example Pesticides | Appendix C_Part 2.pdf | Disk 1 | US EPA | October 7, 2008 |
| Reference Documents | | | Author(s) | Date |
| Overview of the Ecological Risk Assessment Process in the Office of Pesticide Programs, US Environmental Protection Agency | Overview Doc 2004 | Disk 2 | US EPA | January 23, 2004 |
| PRZM-3, A Model for Predicting Pesticide and Nitrogen Fate in the Crop Root and Unsaturated Soil Zones: Users Manual for Release 3.12.2 | PRZM.pdf | Disk 2 | US EPA | September 2005 |
| Exposure Analysis Modeling System (EXAMS): User Manual and System Documentation | ExamsRevG. Pdf | Disk 2 | US EPA | May 2004 |
| User Manual for EXPRESS, the "EXAMS-PRZM Exposure Simulation Shell" | Express.pdf | Disk 2 | US EPA | September 2006 |
| Soil and Water Assessment Tool Theoretical Documentation, Version 2005 | SWAT_Theory. Pdf | Disk 2 | USDA | January 2005 |
| Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health | Methodology | Disk 2 | US EPA | December 2000 |
| OECD GUIDELINE - Hydrolysis as a Function of pH | 111EHydrolysis Final.pdf | Disk 2 | OECD | April 13, 2004 |
| OECD GUIDELINE - Aerobic and Anaerobic Transformation in Aquatic Sediment Systems | 308 Aerobic and Anaerobic Transformation in Aquatic Sediment Systems.pdf | Disk 2 | OECD | April 24, 2002 |
| OECD GUIDELINE - Aerobic and | 307 Aerobic and | Disk 2 | OECD | April 24, |

| Review Document | File Name | Source | Author(s) | Date |
|--|---|--------------|---|-----------------------|
| Anaerobic Transformation in Soil | Anaerobic Transformation in Soil.pdf | | | 2002 |
| OECD GUIDELINE – Leaching in Soil Columns | 312 Soil Column Leaching.pdf | Disk 2 | OECD | April 13, 2004 |
| OECD GUIDELINE - Adsorption - Desorption Using a Batch Equilibrium Method | 106 Adsorption Desorption Using a Bach Equilibrium Method.pdf | Disk 2 | OECD | January 21, 2000 |
| OECD GUIDELINE - PROPOSAL FOR UPDATING GUIDELINE 305 Bioconcentration: Flow-through Fish Test | 305 Bioconcentration Flowthrough Fish Test. pdf | Disk 2 | OECD | June 14, 1996 |
| NAFTA Guidance Document For Conducting Terrestrial Field Dissipation Studies | Terrestrial_field_ dissipation_guidance. pdf | Disk 2 | US EPA and PMRA | March 31, 2006 |
| Pesticide Assessment Guidelines, Subdivision N, Chemistry Requirements, Environmental Fate | Subdivision N_ Pesticide Assessment Guidelines.pdf | Disk 2 | US EPA | August 30, 1982 |
| A Food Web Bioaccumulation Model for Organic Chemicals in Aquatic Ecosystems. Environmental Toxicology and Chemistry 23(1):2343-2355. | | Hard Copy | Arnot, J.A. and A.P.C. Gobas | 2004 |
| USEPA Science Advisory Board Consultation Document Proposed Revisions to Aquatic Life Guidelines Tissue-Based Criteria for "Bioaccumulative" Chemicals | Aquatic Life Criteria Guidelines_Tissue_08- 26-05.pdf | Disk 1 | USEPA, Office of Water | 2005 |
| CEMC. 2007. Users Guide: Canadian Environmental Modeling Centre Water Quality Model and the Simon Fraser University Food Web Model | AGRO_UserGuide.pdf | Disk 1 | Canadian Environme ntal Modeling Center | September 11, 2007 |

| Review Document | File Name | Source | Author(s) | Date |
|------------------------------|---------------------|--------|-----------|-------------|
| PRZM-AGRO SHELL VERSION 1.2f | PA5releasenotes.pdf | Disk 1 | Canadian | January 24, |
| RELEASE AND INSTALLATION | | | Environme | 2008 |
| NOTES | | | ntal | |
| | | | Modeling | |
| | | | Center | |

Appendix 2: Links to the Test Guideline Reference Documents

1. OPPTS Ecological Effects Test Guidelines:

If a Panel member would like to review any of the ecological effects test guidelines, the following link may be used:

850 - Ecological Effects Test Guidelines

2. USDA Agricultural Non-Point Source Pollution Model (AGNPS):

http://www.wsi.nrcs.usda.gov/products/w2q/h&h/tools_models/agnps/index.html

3. USEPA Water Quality Analysis Simulation Program (WASP) Model:

http://www.epa.gov/ATHENS/research/modeling/wasp.html

4. 2006 Science Advisory Board Response to EPA's Proposed Revisions to Water Quality Criteria Guidelines (includes SAB response to Tissue-based Aquatic Life Criteria)

USEPA. 2006. EPA Science Advisory Board (SAB) Consultation on a Proposed Framework for Revising the Guidelines for Deriving Water Quality Criteria for Protection of Aquatic Life. EPA-SAB-CON-06-004. Office of the Administrator, Science Advisory Board, March 8, 2006 http://yosemite.epa.gov/sab/sabproduct.nsf/784EDE989ABDFC0B85257142006BBDCD/\$File/sab-con-06-004.pdf